

AEROWINGS™



SEGA®

CRAVE™
ENTERTAINMENT



T-40201N

WARNINGS Read Before Using Your Sega Dreamcast Video Game System

CAUTION

Anyone who uses the Dreamcast should read the operating manual for the software and console before operating them. A responsible adult should read these manuals together with any minors who will use the Dreamcast before the minor uses it.

HEALTH AND EPILEPSY WARNING

Some small number of people are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns that they encounter in everyday life, such as those in certain television images or video games. These seizures or loss of consciousness may occur even if the person has never had an epileptic seizure.

If you or anyone in your family has ever had symptoms related to epilepsy when exposed to flashing lights, consult your doctor prior to using Dreamcast.

In all cases, parents should monitor the use of video games by their children. If any player experiences dizziness, blurred vision, eye or muscle twitches, loss of consciousness, disorientation, any involuntary movement or convulsion, IMMEDIATELY DISCONTINUE USE AND CONSULT YOUR DOCTOR BEFORE RESUMING PLAY.

To reduce the possibility of such symptoms, the operator must follow these safety precautions at all times when using Dreamcast:

- Sit a minimum of 6.5 feet away from the television screen. This should be as far as the length of the controller cable.
- Do not play if you are tired or have not had much sleep.
- Make sure that the room in which you are playing has all the lights on and is well lit.
- Stop playing video games for at least ten to twenty minutes per hour. This will rest your eyes, neck, arms and fingers so that you can continue comfortably playing the game in the future.

OPERATING PRECAUTIONS

To prevent personal injury, property damage or malfunction:

- Before removing disc, be sure it has stopped spinning.
- The Sega Dreamcast GD-ROM disc is intended for use exclusively on the Sega Dreamcast video game system. Do not use this disc in anything other than a Dreamcast console, especially not in a CD player.
- Do not allow fingerprints or dirt on either side of the disc.
- Avoid bending the disc. Do not touch, smudge or scratch its surface.
- Do not modify or enlarge the center hole of the disc or use a disc that is cracked, modified or repaired with adhesive tape.
- Do not write on or apply anything to either side of the disc.
- Store the disc in its original case and do not expose it to high temperature and humidity.
- Do not leave the disc in direct sunlight or near a radiator or other source of heat.
- Use lens cleaner and a soft dry cloth to clean disc, wiping gently from the center to the edge. Never use chemicals such as benzene and paint thinner to clean disc.

PROJECTION TELEVISION WARNING

Still pictures or images may cause permanent picture tube damage or mark the phosphor of the CRT. Avoid repeated or extended use of video games on large-screen projection televisions.

SEGA DREAMCAST VIDEO GAME USE

This GD-ROM can only be used with the Sega Dreamcast video game system. Do not attempt to play this GD-ROM on any other CD player; doing so may damage the headphones and/or speakers. This game is licensed for home play on the Sega Dreamcast video game system only. Unauthorized copying, reproduction, rental, public performance of this game is a violation of applicable laws. The characters and events portrayed in this game are purely fictional. Any similarity to other persons, living or dead, is purely coincidental.

Thank you for purchasing AeroWings featuring Blue Impulse. Please take the time to read this manual before you start playing the game.



Contents

• Game Controls	2
• Starting a Game	4
• BLUE IMPULSE MISSION (BIM)	6
• Viewing In-Flight Screen	8
• Pause Screen	10
• Replay Controls	11
• SKY MISSION ATTACK (SMA)	12
• FREE FLIGHT (FF)	15
• MULTI PLAY (MP)	16
• OPTION Menu	18
• LIBRARY	20
• EXHIBITION	20
• Basic Control	21
• Planes Used in AeroWings	22
• Flight Stages	26

Let's Head into the Wild Blue Yonder!

AeroWings realistically simulates the incredibly breathtaking world of acrobatic flight as performed by the Japanese Air Self-Defense Force's 11th Squadron of the 4th Air Wing. You will start by learning basic flight techniques, and then join Blue Impulse. Ultimately, you will become an experienced member of the Dolphin Riders! You will undergo full-fledged flight training, complete a variety of missions, and strive to become the leader of your squadron.

AeroWings lets you transform a jet fighter from an instrument of war to sublime performance art. You will paint trails of smoke on the great canvas of the sky, thread your way between buildings, pass over vast fields and oceans, and fly through narrow gorges. Get ready to become a blinding streak though the wild blue yonder!

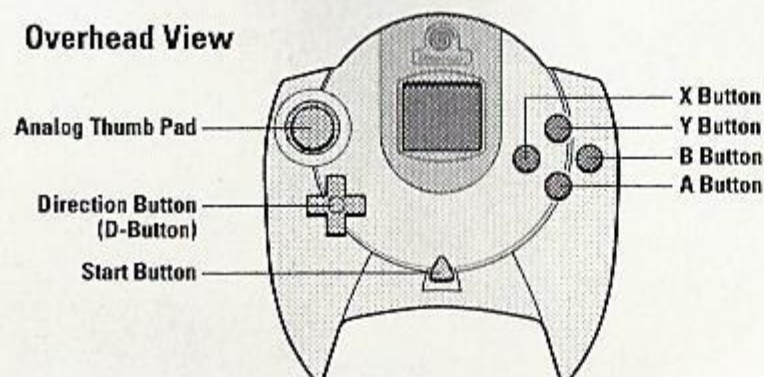
This game is for 1 to 4 players. Make sure the controllers and other peripheral equipment are connected before turning on Sega Dreamcast. Pressing the Start button while holding down the A, B, X, and Y buttons will reset the game, returning you to the title screen.

AeroWingsTM

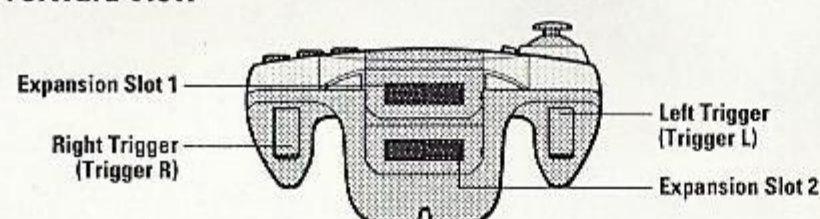
Game Controls

Dreamcast Controller

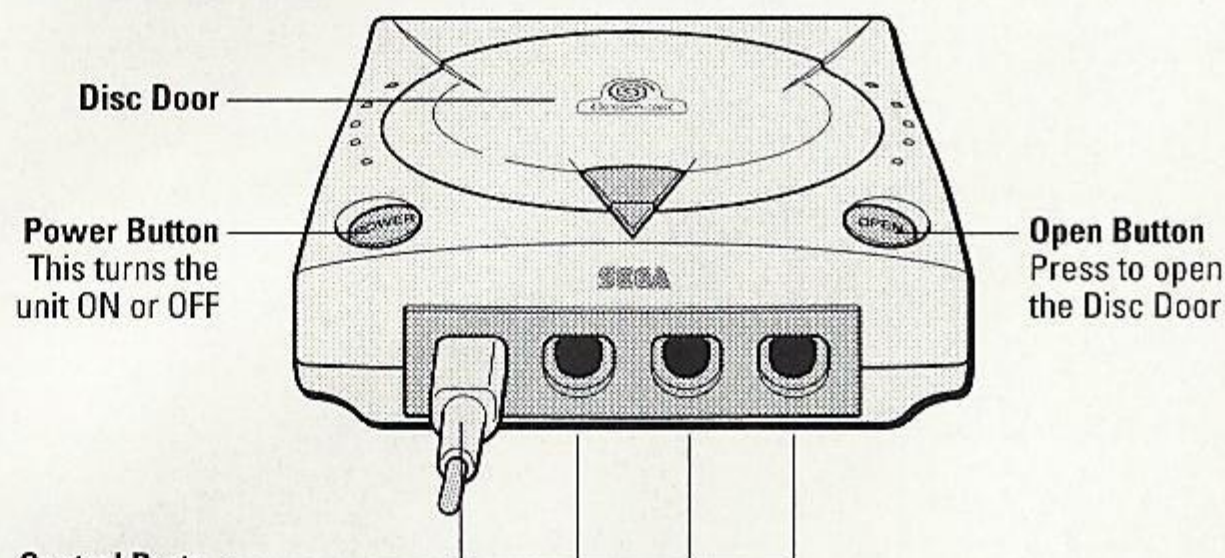
Overhead View



Forward View



Dreamcast Hardware



Control Ports

Use these ports to connect the Dreamcast Controller or other peripheral equipment. From left to right are **Control Port A**, **Control Port B**, **Control Port C**, and **Control Port D**. Use each port to connect controllers for players 1 to 4 respectively. NOTE: **Control Port** can also be referred to as **Port**.

•Never touch the Analog Thumb Pad or Trigger L/R while turning the Sega Dreamcast power ON. Doing so may disrupt the controller initialization procedure and result in malfunction. AeroWings is a 1-4-player game. Before turning the Sega Dreamcast power ON, connect the controller or other peripheral equipment into the control ports of the Sega Dreamcast. To return to the title screen at any point during game play, simultaneously press and hold the A, B, X, Y and Start Buttons. This will cause the Sega Dreamcast to soft-reset the software and display the title screen.

INFORMATION: During game play, executing a soft-reset will cause the title screen to be displayed. Executing a soft-reset from the title screen or during the demo will exit the software and cause Sega Dreamcast main menu to be displayed as stipulated in the "Software Creation Standards."

Analog joystick	Up/down	Control stick: Raises or lowers the plane's nose. Pushing it forward raises the nose and pulling it back lowers the nose.
	Right/left	Control stick: Turns the plane in the direction the stick is moved (right or left).
Directional pad	Up	Moves flaps up
	Down	Moves flaps down
	Right	Turns airbrakes on/off
	Left	Raises/lowers landing gear
A button		Throttle up to increase acceleration
B button		Throttle down to decrease acceleration
X button		Changes your viewpoint
Y button		Turns smoke on/off
L/R triggers		Adjusts plane's rudders. Plane turns in the direction of the trigger pulled. Controls the landing gear when on the ground.
Start button		Starts and pause/unpauses game

AeroWings™



AeroWings™

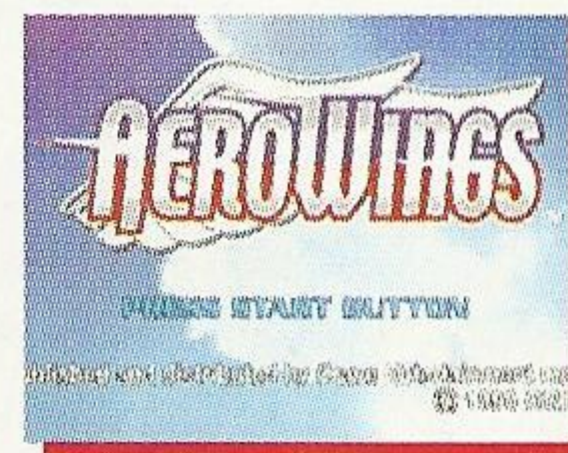
- *Pressing the Y button when you are squad leader displays command help (command menu for members).
- *Inserting the Jump Pack (sold separately) into expansion socket 2 lets you feel the plane's vibrations.
- *Playing with two or more players requires additional controllers (sold separately).
- *Controls are initially set to default values. You can change them in the OPTION menu (page 20).
- *Do not manipulate the analog thumb pad or the L/R triggers when turning on Sega Dreamcast. Failing to observe this warning will result in improper position adjustments and will cause the console to malfunction.

Starting a Game

Playing AeroWings for the First Time

1. Pressing the Start button when in the title screen displays a game selection menu. Select NEW GAME if this is your first time playing.
2. Enter a name and gender in the NAME ENTRY screen that appears. You will be called by the name you select in the training missions to come.
3. Once you select YES in the confirmation screen, you will see the MODE SELECT screen.

- *You may enter a name up to 10 capital letters long.
- *If you want to save your settings, use the OPTION menu in the MODE SELECT screen.
- *Saving data requires a memory card (sold separately).



Continuing a Game

Select CONTINUE if you want to play a game you have already started.

- *Never turn off Sega Dreamcast or connect/disconnect memory cards, expansion units, controllers, or other peripherals while saving or loading a game.

Viewing Controls

If you select TRAINING, an air-traffic controller will provide you with a variety of information including how to use the basic controls and view the Heads-Up Display (HUD). You should do this the first time you play the game and anytime you want to review the controls. You can stop training by pressing the Start button. Flight training begins once training completes. Control the plane while listening to the instructions. After flight training completes, press the Start button to return to the title screen.

- *You can start a game without selecting TRAINING.



AeroWings™



MODE SELECT

AeroWings has four modes.

BLUE IMPULSE MISSION (BIM)

Join Blue Impulse to learn a variety of flight techniques. Your ultimate goal is to become squad leader.

SKY MISSION ATTACK (SMA)

Find targets on the map. Your time and score are what count. Once you gain enough points, the number of type of planes that you can fly will increase.

FREE FLIGHT (FF)

Select a flight stage and the number of members in your formation. This mode allows you to freely fly your way through the wild blue yonder. The planes that you can select depend on your BIM and SMA results.

MULTI PLAY (MP)

[TN: HOW ABOUT CHANGING TO MULTIPLAYER?]

Enables up to four people to play at the same time. This mode will let you experience the joy of formation flight in which you can cooperate closely with other players to execute amazing squad maneuvers.

The MODE SELECT screen also contains the OPTION, LIBRARY, and EXHIBITION menus. Select OPTION to adjust the game difficulty, set key configurations, adjust the sound, and change other settings. Select LIBRARY to view replays and sample performances. You can only select EXHIBITION once you have cleared all Blue Impulse Mission.

AeroWings™

BLUE IMPULSE MISSION (BIM)

In this mode, you become a member of Blue Impulse to attempt a variety of acrobatic flights.

Structure of BIM

BIM is divided into a total of 20 steps. You will learn a new acrobatic flight technique (maneuver) at each step.

STEP 1 to 10: Basic flight training

You will start by learning basic flight techniques as an apprentice pilot. You will learn basic techniques one at a time including takeoff, landing, level flight, turning, and formation flight. Once you pass all of these training steps, you will become an official member of Blue Impulse.

STEP 11 to 20: Performance Flight Training

In these steps, you will learn a variety of acrobatic flight moves including loops and corkscrews. Once you pass all of these steps, you be qualified to serve as squad leader.

STEP 11
STEP 12
.
.
.
STEP 19
STEP 20

STEP 11
STEP 12
.
.
.
STEP 19
STEP 20

TM
AEROWINGS



Training and Advancement

You will fly a T-4 training plane while you are training. Each time you complete a certain number of steps, you will receive qualification to fly another one of Blue Impulse's planes. Upon completing the final step, you will be able to select EXHIBITION in the MODE SELECT screen.



STEP SELECT

Selecting BIM in the MODE SELECT screen displays the step number and a training description. Steps increment from 1 in order, but you can go back at anytime to practice steps you have already passed.



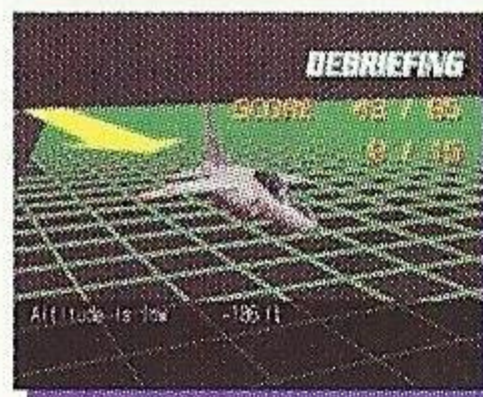
BRIEFING

You will receive instruction on acrobatic flight including control techniques, flight courses, and timing. You can view this as many times as you want. Make sure to pay attention and memorize your instructions before you proceed.



FLIGHT

Now it is time to actually fly your plane. Fly according to your briefing while obeying the instructions of the control tower and squad leader. A replay will begin as soon as your flight completes.



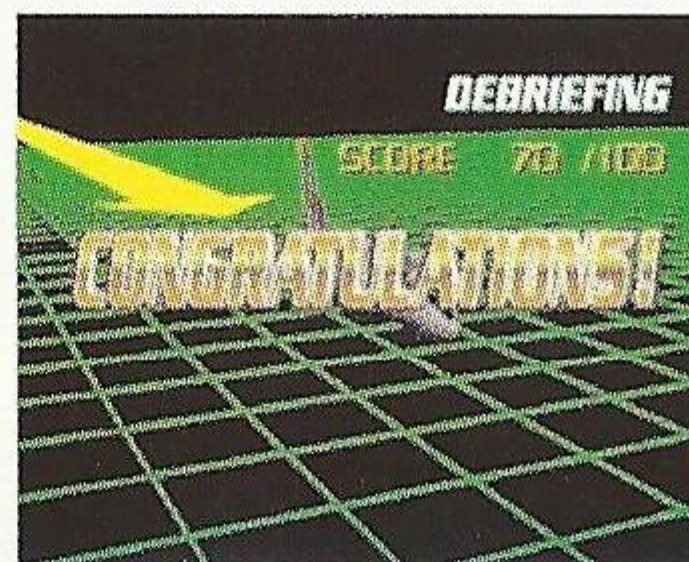
DEBRIEFING

Your flight results will be evaluated and you will receive advice on how to avoid the mistakes you made.

Completing a Blue Impulse Mission

You pass a step by earning at least 60 points out of 100 within the prescribed time. If you run out of time or totally disregard the instructions received during your briefing, your training will end on the spot, and you will fail the step. Stopping training in progress with the PAUSE menu will also cause you to fail training.

*Try to save training results and replays once you complete a training mission. The previous flight's data will be lost if you do not save it before starting your next flight.



PEROWINGSTM

Viewing In-Flight Screen

Heads-Up Display (HUD)

There are a number of gauges and numeric indicators that display the information you need during your flights. The following HUD will be displayed in cockpit view (view from the inside of the plane) when using standard settings. Cockpit design will vary by plane, but the HUD used in each one is the same.

•HUD

•Heading scale

Direction plane is facing. 36 is true north, 18 is true south, 09 is true east, and 27 is true west.

•Pitch scale

How high or low plane's nose is pointed. 0 means it is perfectly level

•Speed

Plane's air speed in knots

•Bank scale

Indicates if plane is banking right or left



•Whisky mark

Indicates exactly where the nose of the plane is pointed

•Altimeter

Altitude in feet

•Velocity vector

Direction plane is heading

•Engine thrust meter

Engine output as a percentage. Shows about 60% when jet engine is idling

•Mach speed and G's

•Breaks

•Flaps

•Landing gear

Each one is displayed when in use

•Smoke

(displayed when in use)

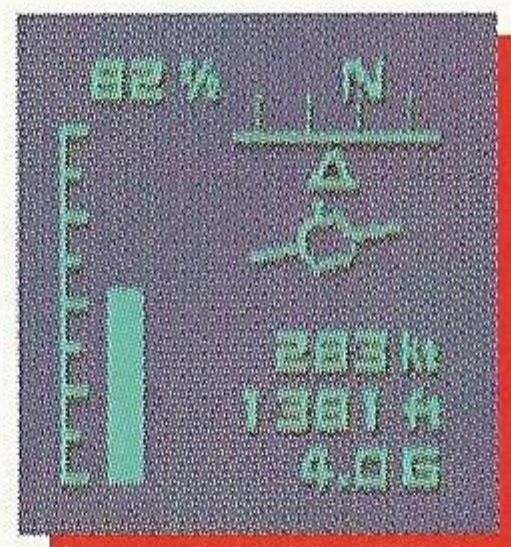
•Simple HUD

A simplified HUD is displayed outside of the cockpit

•Direction

Direction in which planes is heading (NSEW). The triangle is the present direction

•Engine thrust meter (%)



•Level indicator

•Top: Speed in knots (kt)

Middle: Altitude in feet (ft)

Bottom: G's

*You can turn the HUD on/off by selecting DISPLAY in the pause menu during your flight.

*You can switch between the HUD and simple HUD by changing settings in the OPTION menu (=> page 20).

Switching Your Viewpoint

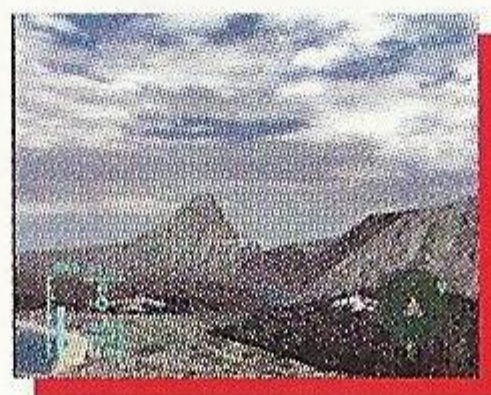
Use the X button to switch your viewpoint. Viewpoints switch as follows when you press the X button under standard settings.



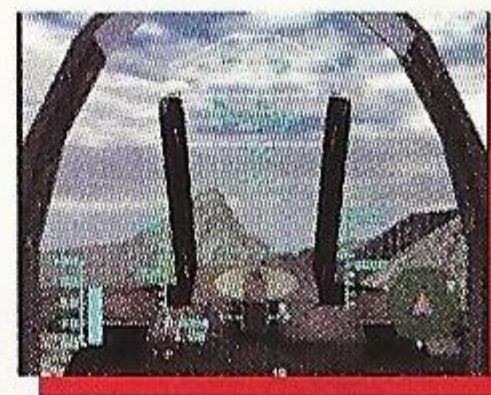
Behind



Cockpit



Formation



Cockpit

[TN: I SUGGEST CHANGING BEHIND VIEW AND REAR VIEW IN THE EXCEL FILES TO 3RD-PERSON VIEW.]

In addition to these views, you can set others using the OPTION menu (=> page 20).

Flying in Formation

When you are squad leader (such as when in EXHIBITION mode), you can send a variety of instructions to the members of your squadron. The command help display will appear on the upper-left portion of the screen while you hold down the Y button. Select commands using the plus pad. The command help display disappears when you release the Y button.

•Member's planes engage in the position of the instructed formation.

•Member's planes release smoke at the same time.



•Member's planes roll at the same time.

•Member's planes leave the formation, and begin to circle at a high altitude. Used when landing.

*The squad leader's plane will not release smoke if it will obstruct the view of planes behind it such as when in the DIAMOND formation.

*Flaps and engine throttle cannot be adjusted during command selection.

PEROWINGSTM

Pause Screen

Pressing the Start button in mid-flight pauses the game. Pressing it again returns to the flight screen.

Pause Menu

CANCEL

Returns to the flight screen.

STOP

Ends the flight. You can view a replay by selecting YES in the confirmation screen.

RETRY

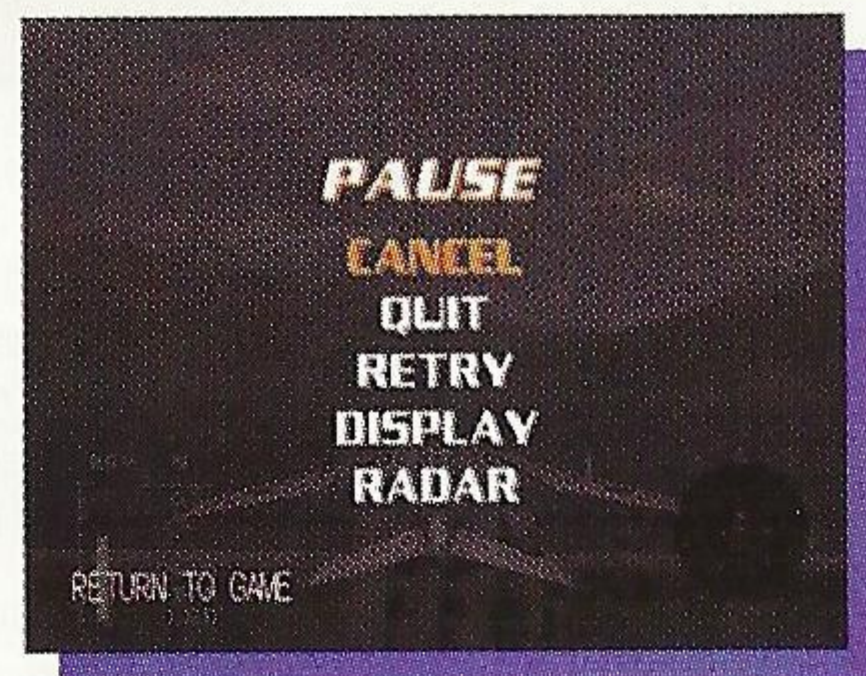
Ends the flight, and then starts it over from the beginning. There will be no replay in this case.

DISPLAY

Switches between HUD and simple HUD. Note that the HUD display cannot be switched when in MP (MULTI PLAY) mode.

RADAR

Shows/hides the radar in SMA and FF mode.



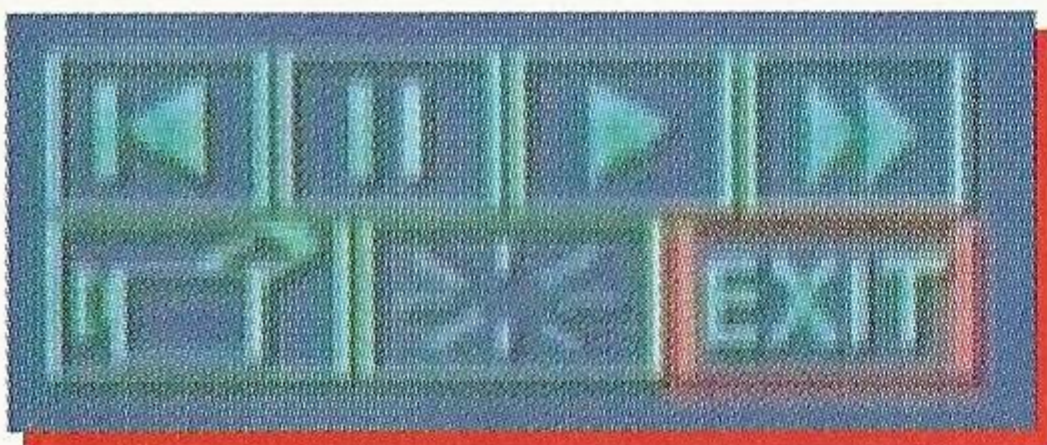
TM
AEROVITES

Replay Controls

You can view a replay of your flight as soon as it completes.

Replay Screen

A set of green controls will appear in the lower-right portion of the screen during replay.



- (1) Start from beginning
- (2) Pause
- (3) Play
- (4) Fast forward
- (5) Switch viewpoint
- (6) Hide controls
- (7) Exit replay

You can select and operate the controls using the plus pad or analog joystick. Pressing the Start button or selecting control (7) (EXIT) displays a confirmation screen for saving the replay. If you save the replay there, you can view it any time you want by selecting LIBRARY in the MODE SELECT screen.

*In MULTI PLAY mode, only the controller used by the player who started the game can be used to select replay controls.

*The save confirmation screen will only appear if you have a memory card in your Dreamcast.

*Up to 80 blocks (max. 6 minutes) can be saved per flight. Any replay data that exceeds this limit will not be saved.

Switching Viewpoints during Replay

Press control (5) during replay to display the viewpoint list. Select the viewpoint you want, and then press the A button to switch to it. You can also switch viewpoints by pressing the X button just as you can during flights. The X button displays all viewpoints in order except for LEADER view.



PEROWINGSTM

SKY MISSION ATTACK (SMA)

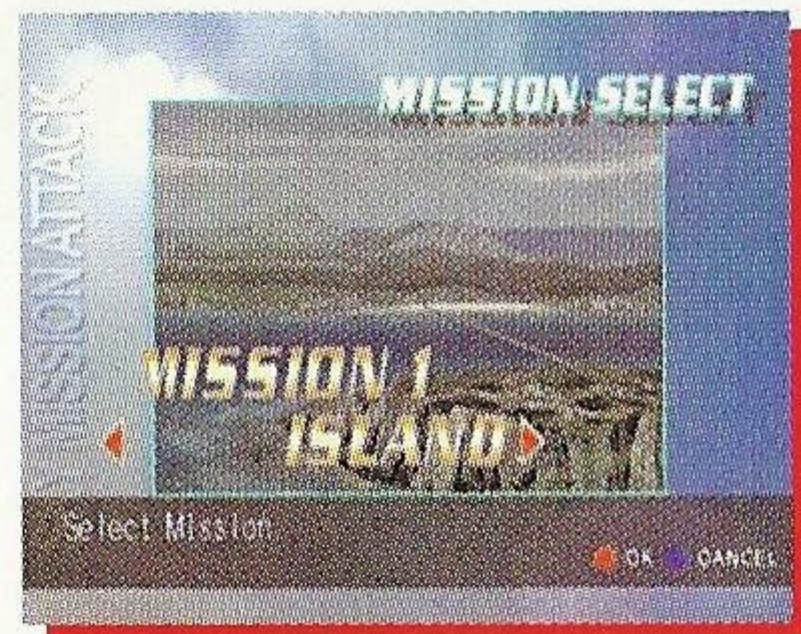
In this mode, you try to get points by finding targets on the map before time is up.

SMA Flow

You start by selecting a mission and plane.

MISSION SELECT

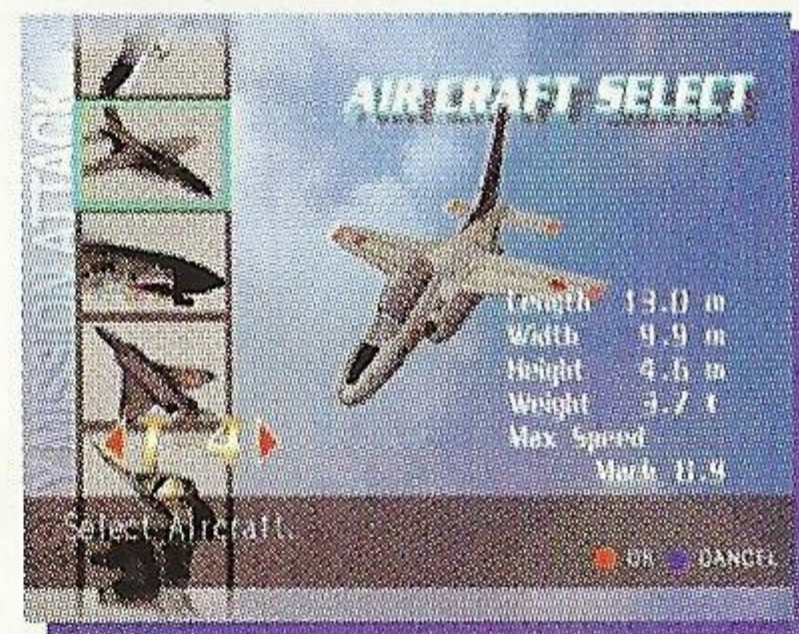
You can select one of eight missions, each with different topographical features and degrees of difficulty. Initially, you can only select missions 1 to 7. You can select them in any order you want, but be aware that the higher the number, the more difficult the mission.



AIR CRAFT SELECT

[TN: AIR CRAFT SHOULD BE ONE WORD]

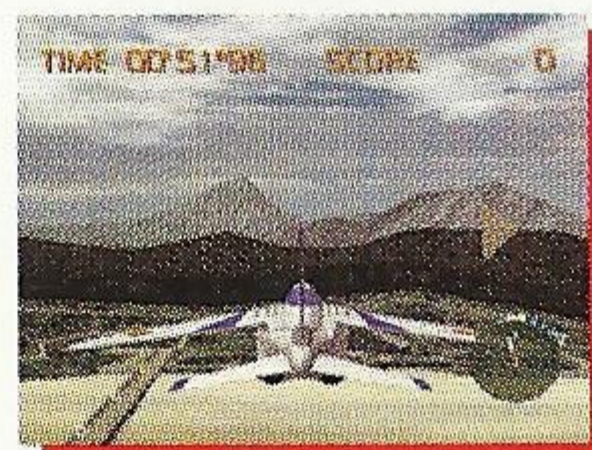
Select the plane you will fly. Initially, you can only select a T-4. The number of planes available for selection increases depending on your BIM and SMA results. You will find that some planes make it easier to find targets.



Viewing the Flight Screen

Your remaining time and score are respectively displayed in the upper-left and upper-right portion of the flight screen.

•Score



•Radar

•Time

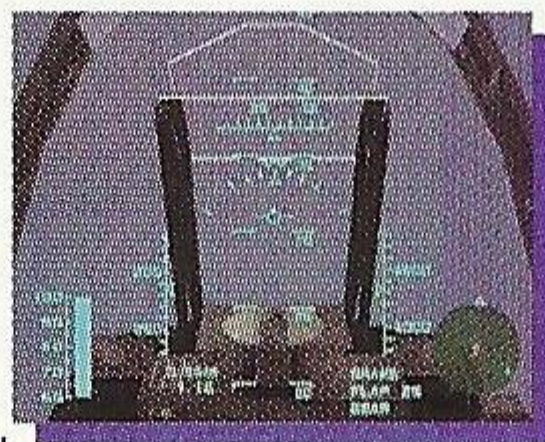
TM
AEROWINGS

Radar

Shows your position in relation to the target.

*The radar can be turned on/off in the PAUSE menu.

- *Landmark*
Main ground targets
- *Direction of travel*
- *Target*
Closest check target will be blinking



• *True north*

• *Your plane*

Target guide (arrow)

Shows the direction of the closest check target.

* You can find targets in any order you want regardless of what the target guide shows.



Target site

There are a total of 3 types of targets that you will encounter on your missions.

- *Distance to target*



Types of Targets

There are a total of 3 types of targets that you will encounter on your missions.

- Check targets (blue/1,000 points)

You must find these targets. Time will be extended by one minute when you find one.

- Point targets (white/500 points)

These are normal targets.

- Double targets (yellow)

These targets boost subsequent points for a limited time. After you find one of these targets, you will get double points for the next targets you find within the time limit.

Example: After acquiring a double target and then one check target and two point targets within the time limit, your point total would be as follows:

$$(1,000 \times 2) + (500 \times 2) + (500 \times 2) = 4,000 \text{ points}$$



PEROWING
TM

Ending SMA Mode

SMA ends as soon as you find all check targets. The remaining time will be added to your score (1 sec. = 20 points). After the replay, you can check your time and score in the scoreboard screen. If you earn enough points, a new plane will be added to the AIR CRAFT SELECT screen. The mission will end immediately if you run out of time or crash.

* You can only get one new plane per mission. You cannot get another new plane by playing the same mission again.

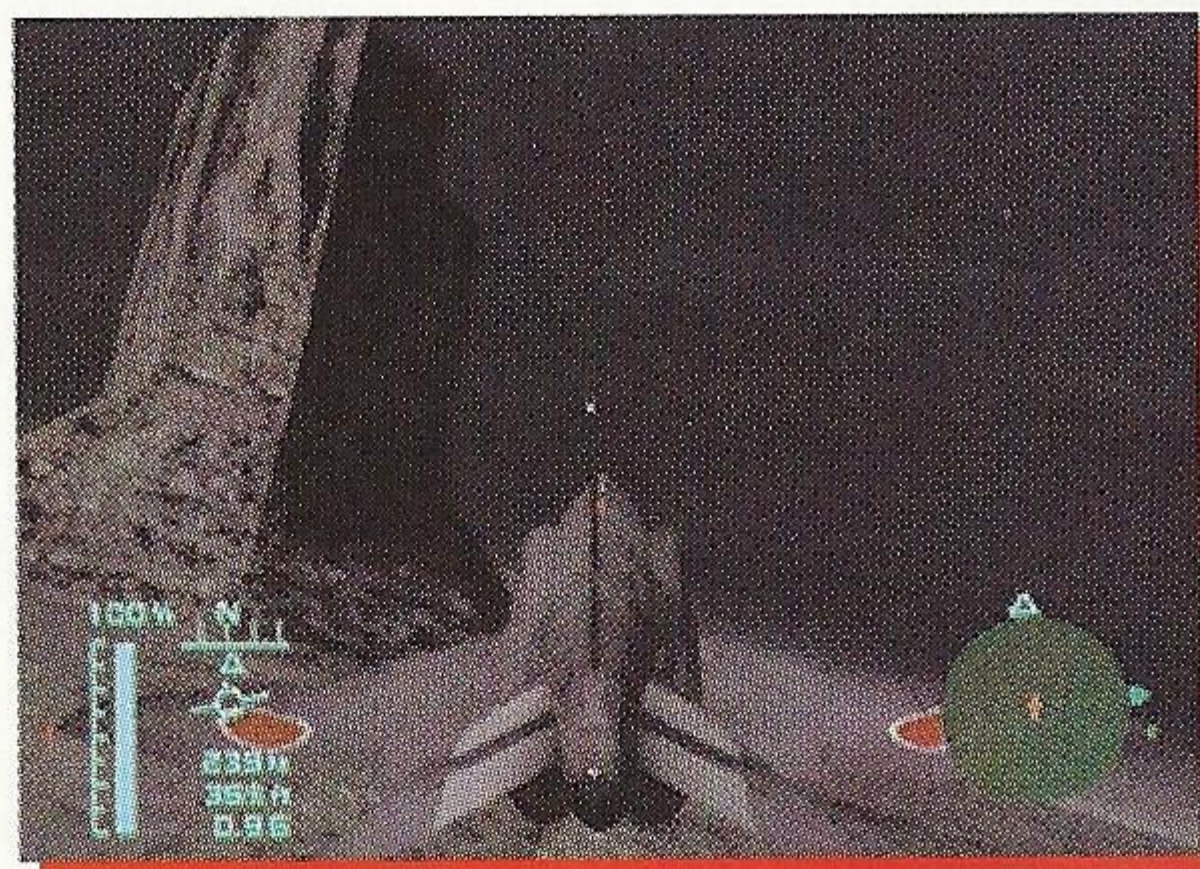
* You cannot get a new plane if you selected BEGINNER under GAME CONFIG in the OPTION menu.

SCORE	14160
TIME	2'22"03
COURSE RECORD	
1.	22780 3'05"53 T-4
2.	14160 2'22"03 T-4
3.	0 0'00"00 T-4
4.	0 0'00"00 T-4
5.	0 0'00"00 T-4
AIRCRAFT RECORD	
22780	3'05"53 T-4
[RETRY][EXIT]	



Mission 8

There is a bonus mission once you get the high score in missions 1 to 7 and get all the plane types. Employ all of the techniques you have learned so far to complete this difficult mission. This mission's stage (Moonlight) can also be selected in FREE FLIGHT and MULTI PLAY mode.



FREE FLIGHT (FF)



In this mode, you can select any stage and plane.

FF Mode Flow

MAP SELECT

Select a flight stage. Each one has different topographical features and time limits. There are a total of 9 maps. The number of maps you can select increases as the game progresses.



AIRCRAFT SELECT

Select the plane you want to fly. Initially, you can only select a T-4. The number of planes available for selection increases depending on your BIM and SMA results.



MEMBER SELECT

Sets the number of members in your formation.



Your flight begins when you are finished making the above settings.

- *The player will be squad leader when flying with multiple members. Squad leader can send commands to member planes using the command help display.
- *Member planes will adjust their flight to the movements of your plane according to the game's AI system.

Ending FF Mode

Select STOP in the PAUSE menu to end FF mode. You can view the flight log containing such data as flight time and maximum speed after the flight and replay end.

- *FF mode ends immediately if you can no longer continue to fly such as when you crash.



FLIGHT LOG	
TIME	0:45:13
TOTAL TIME	2:25:70
MAX SPEED	MO.898
SPEED RECORD	MO.898
MAX ALTITUDE	8388 FT
ALTITUDE RECORD	10000 FT
(GET BACK)	

PerovitesTM

MULTI PLAY (MP)

In this mode, you can fly in a formation consisting of from 2 to 4 planes.

MP Mode Flow

Start by selecting a flight plan. Select one of the choices in the MANEUVER SELECT menu. If you select FREE FLIGHT, you can select a map and plane. The ENTRY screen will appear once you select a maneuver.

* Your plane is limited to the T-4 Blue Impulse if you selected a maneuver.

MAP SELECT

Select a flight stage. Each one has different topographical features and time limits. There are a total of 9 maps. The number of maps you can select increases as the game progresses.

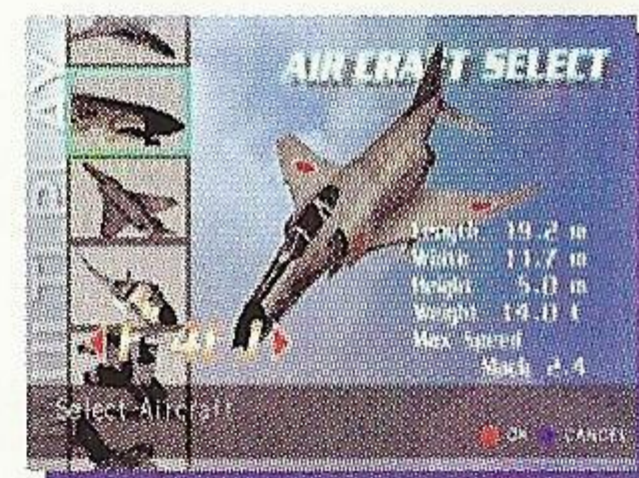
AIRCRAFT SELECT

Select the plane you want to fly. Initially, you can only select a T-4. You cannot select different planes for each member.

ENTRY

Enter the members of your formation. The CPU will be squad leader if you selected a maneuver. And if there are not enough members for the maneuver, the CPU will add them. The player that started the game in FREE FLIGHT mode will be squad leader. Position will be determined by the order members where entered.

*The player who started the game selects a flight plan and map.

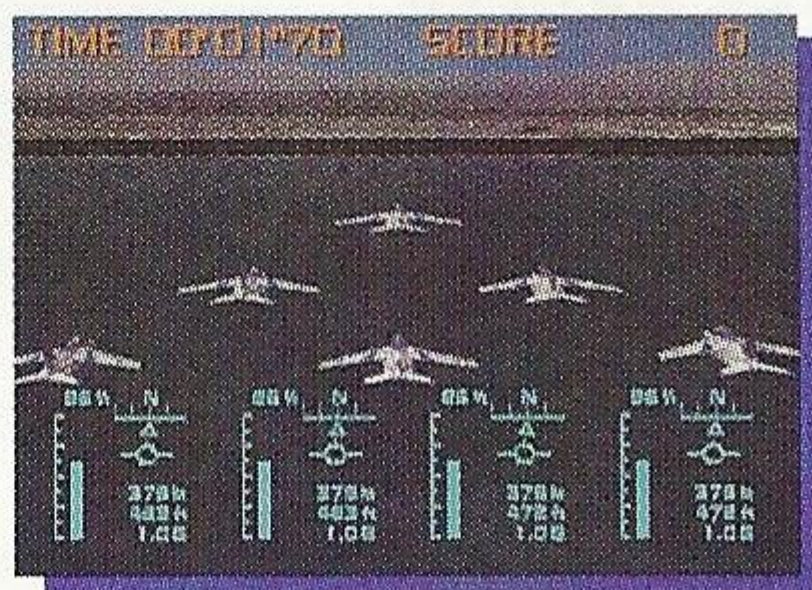


AEROWINGS™

Flying in MP Mode

In MP mode, a simple HUD for each plane will be displayed at the bottom of the screen from port 1 to 4. (No HUD is displayed for CPU planes.) Make sure not bump into other planes or stray too far from them. Attempt breathtaking formation flight by cooperating and communicating with your other squad members.

- There is no command help display for squad leader in MP mode.
- You cannot switch the HUD display in MP mode.
- You cannot switch viewpoints during MP flights.



Ending MP Mode

- Maneuver selected

MP mode ends as soon as time runs out or the maneuver performance is finished.

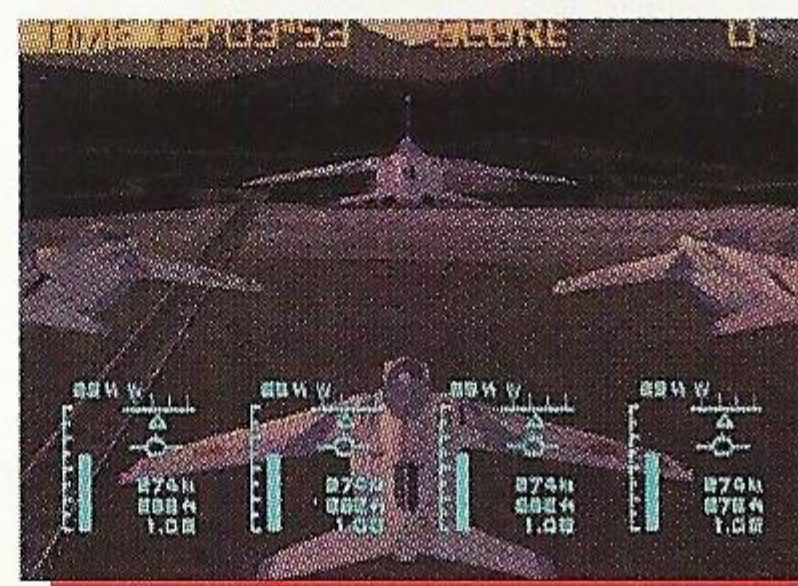
- FREE FLIGHT selected

You can end MP mode at anytime by selecting STOP in the PAUSE menu.

A player is eliminated if he/she can no longer continue such as when their plane crashes or strays too far from squad leader. MP mode ends if all members are eliminated.

Once the flight and replay end, you can view each players score in the scoreboard screen. Scores will go up for completing performances and executing breathtaking formations, even when FREE FLIGHT is selected.

- When FREE FLIGHT is selected, the squad leader's score will be an average of the members' scores.



SCORE		0
TIME		0'03'96
AIRCRAFT RECORD		
SCORE	TIME	MEMBERS
120	0'00'00	4
100	0'00'00	4
80	0'00'00	4
60	0'00'00	4
40	0'00'00	4
[RETRY][EXIT]		

PERFORMANCESTM

OPTION Menu

The OPTION menu allows you to change a variety of settings and to save/load games.

KEY CONFIG

CONTROL TYPE

Changes the up/down setting of the analog joystick and plane nose.

KEY TYPE

Switches between the analog joystick and plus pad.

RESPONSE

Sets one of three levels for analog joystick response.

CUSTOM BUTTON

Allows you to assign controls to buttons by selecting a control name and then pressing the button to which to assign the control.

GAME CONFIG

Sets one of two difficulty levels.

LEVEL

Turns the Jump Pack on/off.

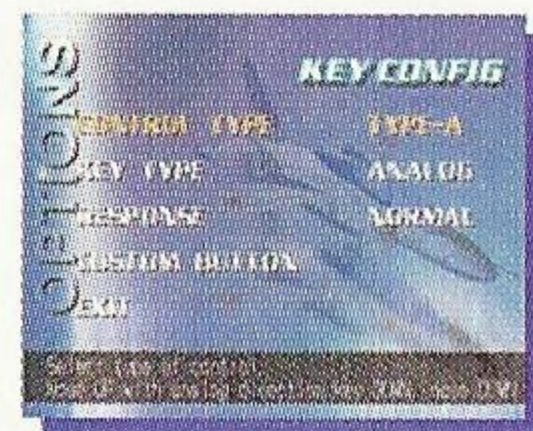
VIBRATION

Turns wide-screen display on/off.

FLIGHT VIEW CONFIG

SCREEN

Enables you to turn on/off each viewpoint for viewpoint switching using the X button.



COCKPIT	View from within plane
BEHIND	View from behind plane
FORMATION	View from even further back than BEHIND (right or left).
LEADER	View from squad leader's plane
NOSE	Forward view including plane's nose
TAIL	Rear view including plane tail
ROUND	Rotating view around plane
ON BOARD	View from camera on outside of plane
NEAR	View from near plane
WATCHER	View from passenger's seat
CAMERMAN	View that follows plane while zooming in and out
PASS	View as plane passes by camera
CURVE	View as camera overtakes plane



*The LEADER view is not displayed if you are squad leader.

*COCKPIT view is always on. BEHIND and FORMATION view are also always on under the standard settings.



HUD (Heads-Up Display)

HUD can be set for cockpit view and other views.

RADAR

Turns radar display on/off.

Sound

Various game BGM and audio settings.

AUDIO

Switches between stereo and mono.

BGM VOLUME

Adjusts BGM volume and turns it on/off.

BGM

Lets you listen to BGM during game. Press A to play and B to stop.

SE

Lets you listen to sound effects during game. Press A to play and B to stop.

VOICE

Lets you hear dialogue during game.

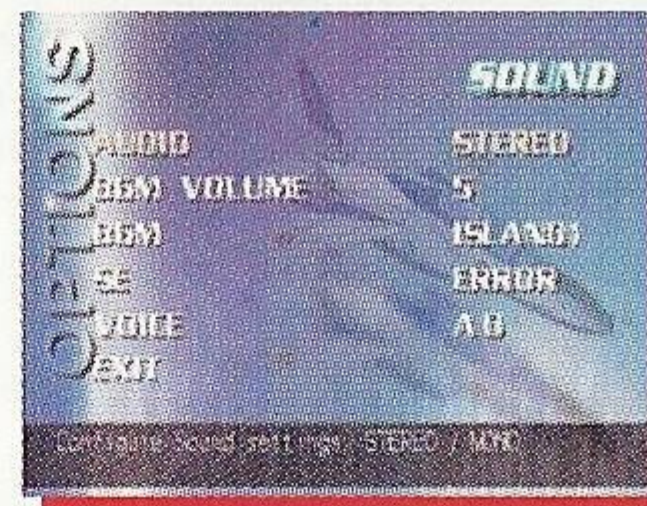
SAVE/LOAD

Saves/loads files.

The following number of blocks are required to save a game:

System file: 15 blocks

Replay data file: 80 blocks (per flight)



PEROWINGSTM

PREVIEW

Plays a movie introducing the latest games from CRI and other information. Pressing the A button or Start button during the movie returns you to the OPTION menu.

LIBRARY

The LIBRARY menu allows you to replay past recordings and view an example performance.

FLIGHT RECORDS

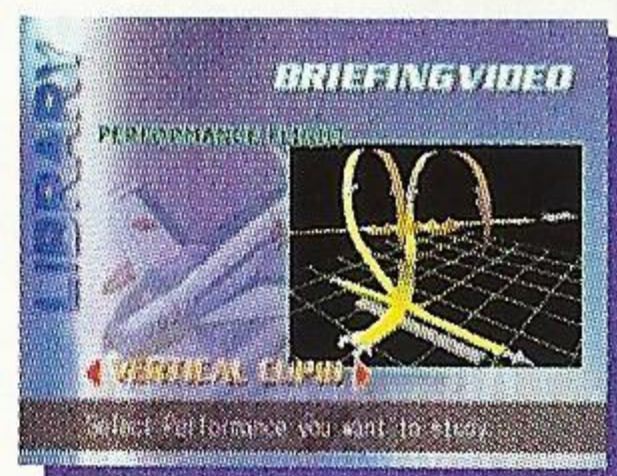
Replay will begin once you make a selection from the file list. Select EXIT if you want to stop replay.



BRIEFING VIDEO

You can view an auto-demo of an sample performance. Select EXIT if you want to stop the performance.

*You can only select BRIEFING VIDEO after you have completed all BIM steps.



EXHIBITION

You can select EXHIBITION mode once you have completed the BLUE IMPULSE MISSION.

Flow of EXHIBITION

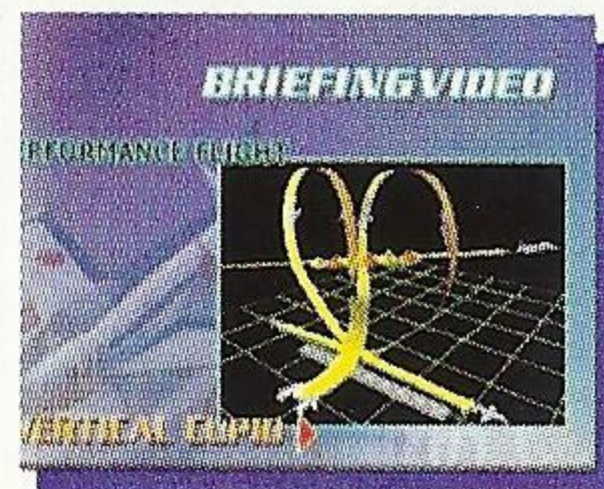
The flight begins once you have selected a maneuver (type of acrobatic flight) and position. Use the techniques you have acquired so far to execute advanced maneuvers that will thrill the spectators below. There are no points awarded or pass/fail decision to be made in this mode, so you can concentrate on trying new maneuvers and putting on a breathtaking performance.

*Members fly according to the selected maneuver.

*The maneuver examples in EXHIBITION mode can be checked in the LIBRARY menu.

*You can try EXHIBITION mode as many times as you want.

*EXHIBITION maneuvers can be selected in any order you want.



Basic Control



Before you set off on a flight, make sure to read this section, learn how to fly your plane in the TRAINING game, and then carefully practice basic flight in BIM mode and more advanced flight in FF mode.

Raising/Lowering Nose

Use the analog joystick (control stick) to raise and lower your plane's nose. The plane's nose will rise while you pull back the analog joystick and lower while you push it forward.

Changing Direction

Turn your plane right or left by moving the analog joystick (control stick) in the direction you want to turn. The plane will continue to turn in the direction of the analog joystick. It will roll if you hold the analog joystick left or right long enough. To turn right, move the control stick to the right, and then when the right side of plane is facing down, pull the control stick back. Once the nose is pointing in the desired direction, move the control stick to the left to level the plane.

Use the rudders when you want to make minor adjustments in your course. The nose will point in the direction of the trigger (L or R) that you pull. When the landing gear is on the ground, the L/R triggers change their direction, causing the plane to turn in the direction of the trigger pulled. Pulling the L/R triggers at the same time applies the landing gear brakes.

Changing Air Speed

Air speed is shown in knots. 1 knot is about 1.8 km/hour or 1.12 mph. The A button raises engine output to increase speed. The button is for decelerating. Pressing right on the plus pad applies the air brakes to decelerate when landing.

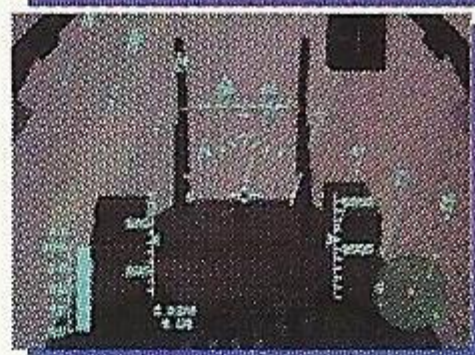
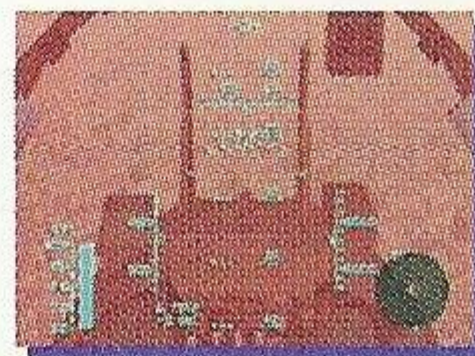
Decelerating too much in midair may cause your plane to crash. When in the T-4, make sure that your air speed never falls below 100 knots (about 180 km/hour or 111 mph).

G's and In-Flight Problems

Vertical acceleration can damage a plane and injure its pilot. The plane normally undergoes 1 G during normal level flight. During horizontal inverted flight, the plane undergoes -1 G. Sudden turns, climbs, and dives as well as great speeds will increase G's. If G's go too high, the pilot will lose consciousness due to the following conditions:

Blackout: Occurs when pilot undergoes high positive G's (7 G's or more). Breathing become difficult and visual field narrows.

Redout: Occurs when pilot undergoes high negative G's (-4 G's or more). Visual field turns bright red.



HeroWingsTM

Planes Used in AeroWings

A total of 11 planes appear in this game. The planes you can select depend on your BLUE IMPULSE MISSION and SKY MISSION ATTACK results.

T-4

Training plane you fly when first playing the game. It combines high performance with ease of control.

Length: 42.65 ft. (13.0 m)
Width: 32.48 ft. (9.9 m)
Height: 15.09 ft. (4.6 m)
Weight: 3.7t
Max. Speed: Mach 0.9



T-4 Blue Impulse

Training plane currently used by Blue Impulse. Reproduces the color of the real plane.

Length: 42.65 ft. (13.0 m)
Width: 32.48 ft. (9.9 m)
Height: 15.09 ft. (4.6 m)
Weight: 3.7 t
Max. Speed: Mach 0.9



T-2 Blue Impulse

Second-generation Blue Impulse plane. Its main feature is its high accelerating power.

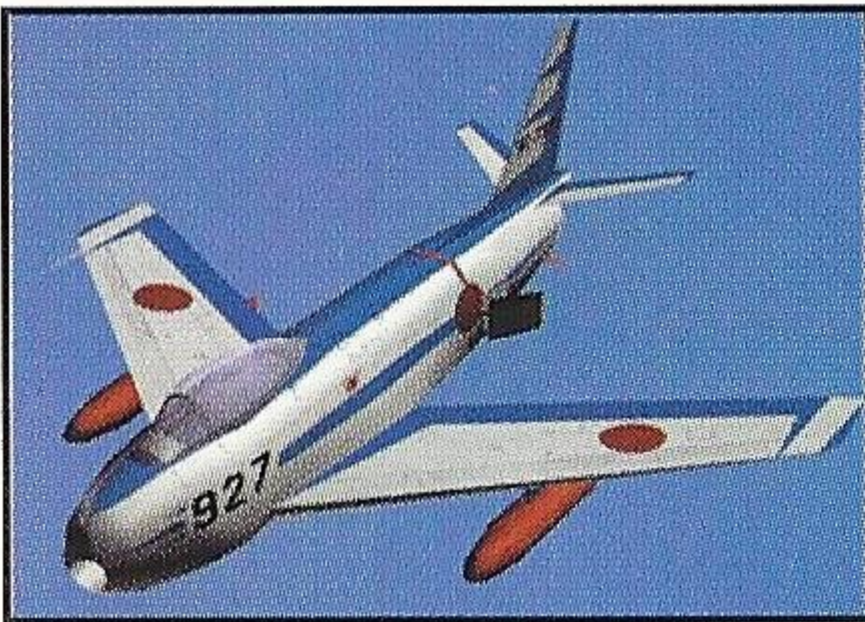
Length: 58.73 ft. (17.9 m)
Width: 25.92 ft. (7.9 m)
Height: 14.44 ft. (4.4 m)
Weight: 6.2 t
Max. Speed: Mach 1.6



TM
AeroWings



A total of 11 planes appear in this game. The planes you can select depend on your BLUE IMPULSE MISSION and SKY MISSION ATTACK results.



F-86F Blue Impulse

Training plane currently used by Blue Impulse. Reproduces the color of the real plane.

Length:	42.65 ft. (13.0 m)
Width:	32.48 ft. (9.9 m)
Height:	15.09 ft. (4.6 m)
Weight:	3.7 t
Max. Speed:	Mach 0.9

F-4EJ

Training plane you fly when first playing the game. It combines high performance with ease of control.

Length:	42.65 ft. (13.0 m)
Width:	32.48 ft. (9.9 m)
Height:	15.09 ft. (4.6 m)
Weight:	3.7t
Max. Speed:	Mach 0.9

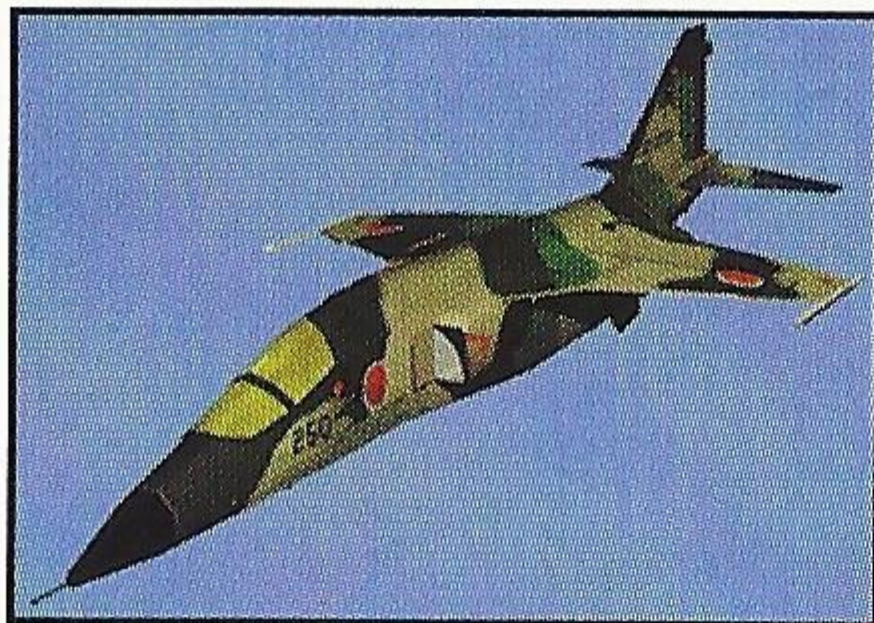


F-4EJ~

Training plane currently used by Blue Impulse. Reproduces the color of the real plane.

Length:	42.65 ft. (13.0 m)
Width:	32.48 ft. (9.9 m)
Height:	15.09 ft. (4.6 m)
Weight:	3.7 t
Max. Speed:	Mach 0.9

ferocious



F-1

Supersonic support fighter produced in Japan.

Length: 58.73 ft. (17.9 m)
Width: 25.92 ft. (7.9 m)
Height: 14.44 ft. (4.4 m)
Weight: 6.2 t
Max Speed: Mach 1.6

F-2

Next-generation support fighter jointly developed by the U.S. and Japan by modifying the F-16.

Length: 50.85 ft. (15.5 m)
Width: 36.42 ft. (11.1 m)
Height: 16.40 ft. (5.0 m)
Weight: 9.5 t
Max Speed: Mach 2.0



F-15J

High-performance fighter jet.

Length: 63.65 ft. (19.4 m)
Width: 42.98 ft. (13.1 m)
Height: 18.37 ft. (5.6 m)
Weight: 12.0 t
Max Speed: Mach 2.5



F-15DJ

Multi-seater version of the F-15J fighter jet currently in service at the Japanese Air Self-Defense Force.

High-performance fighter jet.

Length: 63.65 ft. (19.4 m)

Width: 42.98 ft. (13.1 m)

Height: 18.37 ft. (5.6 m)

Weight: 12.0 t

Max Speed: Mach 2.5

RF-4E

Reconnaissance plane with a high-performance camera.

Well suited for intelligence collection.

Length: 62.99 ft. (19.2 m)

Width: 38.39 ft. (11.7 m)

Height: 16.40 (5.0 m)

Weight: 14.6 t

Max Speed: Mach 2.2



HeroinesTM

*Planes equipped with afterburners do not leave smoke trails when used.

*The planes equipped with afterburners are the T-2 Blue Impulse, F-4EJ, F-4EJ Kai, F-1, F-2, F-15J, F-15DJ, and RF-4E.

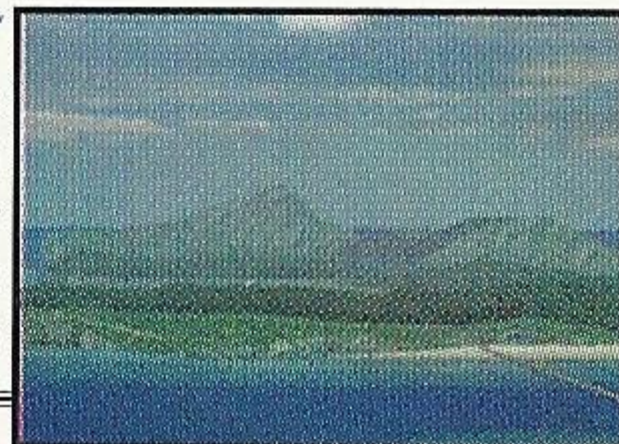
*For afterburners, press the A button again when engine output is at 100%.

Flight Stages

There are number of flight stages with various topographical features and time limits. Each one provides a unique flight experience. Landmarks are targets displayed on your radar in SMA and FF mode.

•Island in Summer

Island with exquisite coral reefs and high mountains. Includes a straight bridge linking a small and large island across a channel. Enjoy the superb scenery during your flight. Landmark: Foot of the bridge (on the large island side)



•Sunset (Island) in Summer

Dark mountain ridge rising into the slowly darkening evening sky. See the ocean and your plane bathed in soft light. A fantastic scene unfolds before your eyes.



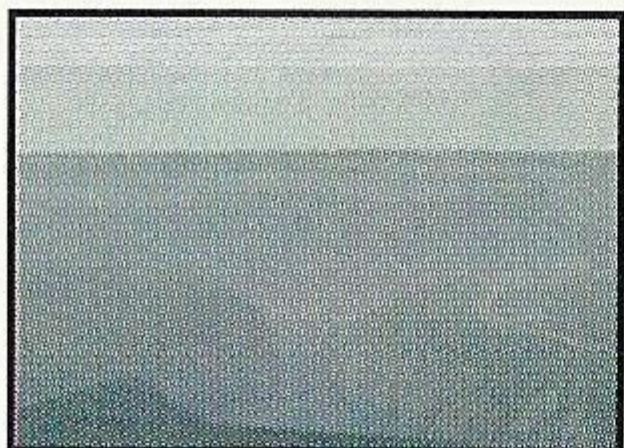
•Valley in Autumn

Steel bridge spanning a deep gorge. Enjoy viewing the magnificent dam and waterfall and the rolling terrain. The autumnal colors of the turning leaves dazzle the eyes. Landmark: Dam



•Cloudy (Valley) in Spring

Passing through the low-hanging clouds, you find another world that shines with white light. Flying above the endless sea of clouds provides a mysterious setting. Try going as high as your plane will allow.



•City in Winter

Low-altitude flight between buildings and pinnacles. Fly by the seat of your pants just above the rooftops. Experience truly thrilling flight in a urban setting. Landmark: Tower



TM
AEROWINGS



•Night City in Summer

Nighttime city lit up with beautiful lights. Cruise above the city enjoying the spectacular night view. You can also enjoy the effects of your plane's lights and afterburners.

•Base In Autumn

Terrain based on the Japanese Air Self-Defense Force base in Matsushima. The green zone the spreads out at the river mouth and the coastline provide a nice contrast. You can take off and land on the runway. Landmark: Control tower (runway)



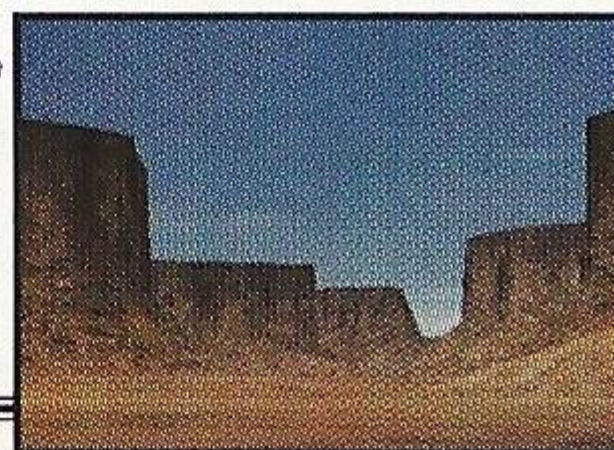
•Festival (Base) in Summer

Waves of people fill the grounds. Hear the cheers loaded with anticipation as you head to the runway. Lets you experience the thrill of an exciting air show.

•Monument in Autumn

View huge, fantastically shaped rocks in this artwork-like landscape. Intense sunlight beats down on the reddish-brown rock. Experience the wonders of nature to your heart's content.

Landmark: ??Big table??



•Moonlight (Monument) in Winter

Fantastically shaped rocks illuminated by clear moonlight. See the spectacular landscape that is lonely yet awe-inspiring. Provides a bewitching spectacle.

PEROWINGSTM

*Festival (Base) in Summer is only available in EXHIBITION mode. Moonlight (Monument) in Winter can only be selected once you have fulfilled the prescribed conditions.

CREDITS

CRAVE ENTERTAINMENT

Executive Producer
Mike Arkin

Producer
Daryl Pitts

QA Manager
Michael Schneider

Lead Tester
Chris Scaglione

Testers
Jeff Nachbaur
Dan Chaffey
John Kellogg

Translation
Jason Franzman

MARKETING

Director of Marketing
Jane Gilbertson

Product Manager
Keith Wymetalek

AUDIO

Direction/Casting
Ellyn Stern & Richard Epcar

Studio/Engineering
Hook Studios

Post-Audio Engineering
Bill Black

Special Thanks to:
Nima Taghavi
Holly Newman
Mark Burke
Shinji Katsukawa
Four Winds

CRI (Developer Credits)

Director :
Toru Kujirai

Planner :
Shinya Izumi
Eriko Takimura

Programmer :
Yukinori Kaneko
Takuo Kaneko
Kiyotaka Sakai
Hitoshi Iizawa
Ryutaro Hayakawa

Designer :
Kiyoshi Fujita
Seiji Aoki
Nao Yanase
Katsumi Yabuno
Masahiro Katsuta
Fumiaki Suzuta
Yuichi Matsui
Takeshi Yamada
Miwako Ohshima

Tool, Library :
Toru Kujirai
Hideo Gunji
Ryutaro Hayakawa
Toshinori Ishibashi

Sound :
Naoshi Kunisawa
Toshinori Ishibashi

Supervisor :
Nobuhiro Fujiwara
(ex-Commander of No.4 Air
Fleet, Self Defense Force)

Special Thanks to :

Collaboration :
Japan Air Self Defense Force
Beruga Computer Ltd.
Serami Inc.
SignProjects Ltd.
Shogakukan Production Inc.
Oscar Promotion
Atsunobu Hidaka (BitWave)
Motoki Kobayashi (Takeuchi
Entertainment Planning)
Masanori Kodama (Bits)

Producer :
Keisuke Chiwata

Production :
CRI (CSK Research Institute
Corp.)



Warranty and Service Information

CRAVE ENTERTAINMENT, Inc. warrants to the original purchaser of this CRAVE ENTERTAINMENT, Inc. Software product that the medium on which this computer program is recorded is free from defects in material and workmanship for a period of ninety (90) days from the date of purchase. The CRAVE ENTERTAINMENT, Inc. software program is sold "AS IS" and without any expressed or implied losses or damages of any kind resulting from use of this program.

If the CRAVE ENTERTAINMENT, Inc. software product fails to comply with this limited warranty, CRAVE ENTERTAINMENT, Inc. agrees to either repair or replace, at its option, free of charge, the noncomplying Crave Entertainment, Inc. software product provided it is return by the original purchaser, postage paid, with proof of purchase to CRAVE ENTERTAINMENT, Inc.'s Factory Service Center.

When returning the program for warranty replacement please send the original product disk(s) or cartridge only in protective packaging and include: (1) a photocopy of your dated sales receipt; (2) your name and return address typed or clearly printed; (3) a brief note describing the defect, the problem(s) you are encountered and the system on which you are running the program; (4) if you are returning the program after the 90-day warranty period, but within one year after the date of purchase, please include check or money order for \$15 U.S. currency per Dreamcast specific GD-ROM or \$30 U.S. currency per Cartridge replacements. Note: Certified mail recommended.

In the U.S. send to:

Warranty Replacements
Crave Entertainment, Inc.
19645 Rancho Way
Rancho Dominguez, CA 90220

This warranty shall not be applicable and shall be void if the defect in the Crave Entertainment, Inc. software product has arisen through abuse, unreasonable use, mistreatment, neglect or reasonable wear and tear. IN THIS WARRANTY IS OBLIGATION IN LIEU OF ALL OTHER WARRANTIES AND NO OTHER REPRESENTATIONS OR CLAIMS OF ANY NATURE SHALL BE BINDING ON OR BLIGATE CRAVE ENTERTAINMENT, INC. ANY IMPLIED WARRANTIES APPLICABLE TO THIS SOFTWARE PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICIPATING PURPOSE, ARE LIMITED TO THE NINETY (90) DAY PERIOD DESCRIBED ABOVE. IN NO EVENT WILL CRAVE ENTERTAINMENT, INC. BE LIABLE FOR ANY DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM POSSESSION, USE OR MALFUNCTION OF THE CRAVE ENTERTAINMENT, INC. SOFTWARE PRODUCT.

Some states do not allow limitations as to how long an implied warranty lasts and/or exclusions of liability may not apply to you. This limited warranty gives you specific legal rights and you may also have other rights, which vary, from state to state.

Customer Support

You may need only simple instructions to correct a problem with your product. Call the Customer Service Line at 970-392-7022 24 hours a day, 7 days a week.

If you are looking for Hints & Tips for any Crave Entertainment product, please call:

US – 900-903-4468	\$0.95 U.S. dollar per minute
Canada – 900-677-4468	\$1.50 Canadian dollar per minute

Must be 18 years or have parent's permission. Touch tone phone required.

ESRB RATING

This product has been rated by the Entertainment Software Rating Board. For information about the ESRB rating, or to comment about the appropriateness of the rating, please contact the ESRB at 1-800-771-3772.

Sega is registered in the US Patent and Trademark Office. Sega Dreamcast, the Dreamcast Swirl, are trademarks of SEGA. Sega of America, P.O. Box 7639, San Francisco, CA 94120. All Rights Reserved. Programmed in Japan. Made and printed in the USA. WARNING: Operates only with NTSC televisions and Sega Dreamcast systems purchased in North and South America (except Argentina, Paraguay and Uruguay). Will not operate with any other televisions or Sega Dreamcast systems. Product covered under one or more of the following U.S. Patents: 5,460,374; 5,525,770; 5,627,895; 5,688,173; 4,442,486; 4,454,594; 4,462,076; Re. 35,839; Japanese Patent No.2870538, (Patents pending in U.S. and other countries); Canada Patent No. 1,183,276. The ratings icon is a trademark of the Interactive Digital Software Association.

SEGA[®]

The background of the entire page is a dynamic scene from the game Aerowings. It shows three blue aeroplanes flying in a V-formation across a clear blue sky, leaving long, vibrant trails of red, white, and purple smoke. Below the sky, a dark, silhouetted city skyline is visible. In the lower right foreground, a large, red and blue mechanical robot, resembling a giant vacuum cleaner head, is partially visible, looking towards the left.

CR AVE
ENTERTAINMENT

Aerowings, Crave and their respective logos are trademarks of Crave Entertainment, Inc. All rights reserved. © 1999 Crave Entertainment, Inc. CRI is a registered trademark of CSK Research Institute.

Sega is registered in the U.S. Patent and Trademark Office. Sega Dreamcast, the Dreamcast Swirl, and the Dreamcast logo are trademarks of SEGA. Sega of America, P.O. Box 7639, San Francisco, CA 94120. All Rights Reserved. Programmed in Japan. Manufactured and printed in the USA. WARNING: Operates only with NTSC televisions and Sega Dreamcast systems purchased in North and South America (except Argentina, Paraguay and Uruguay). Will not operate with any other televisions or Sega Dreamcast systems. Product covered under one or more of the following U.S. Patents: 5,460,374; 5,525,770; 5,627,885; 5,688,173; 4,442,486; 4,454,804; 4,462,076; Re. 35,839; Japanese Patent No. 2870538. If patents pending in U.S. and other countries. Canada Patent No. 1,183,276. The rating icon is a trademark of the Interactive Digital Software Association.

SEGA